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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,796	08/04/2003	Timothy P. Beaton	05516/045003	7248

7590 10/19/2005

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Houston, TX 77010

EXAMINER

GAY, JENNIFER HAWKINS

ART UNIT	PAPER NUMBER
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3672

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/633,796

Applicant(s)

BEATON, TIMOTHY P.

Examiner

Jennifer H. Gay

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-13, 16 and 17 is/are allowed.
- 6) ☒ Claim(s) 14, 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. 10/6/05.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Doster et al. (US 5,765,653) in view of Fielder (US 5,678,644).

Doster et al. discloses a reaming tool that includes the following features:

- A body **102** adapted to couple to a drill string at both axial ends (7:53-53 and Figure 7).
- A plurality of reaming blades **110-116** having at least one cutter **122** attached thereto. The plurality of reaming blades includes two radially most extensive reaming blades **110, 112**.

Doster et al. discloses all of the limitations of the above claims except for the reaming blades having at least one insert on a laterally outermost surface.

Fielder discloses a reaming tool similar to that of Doster et al. Fielder further teaches placing inserts **152** on the laterally outermost surface of the reaming blades (Figures 5 and 15).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the tool of Doster et al. to include inserts as taught by Fielder in order to have minimized the impact forces on the cutters that could have damaged the cutters thus increasing the life of the bit (5:55-6:5).

3. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Doster et al. (US 5,765,653) in view of Fielder (US 5,678,644) as applied to claim 14 above, and further in view of Knutsen (US 4,385,669).

Doster et al. and Fielder disclose all of the limitations of the above claims except for selected ones of the blades having a spiral structure.

Knutsen discloses a reaming tool similar to that of Doster et al. and Fielder. Knutsen further teaches forming select ones of the blades with a spiral structure (Figures).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the blades of Doster et al. in view of Fielder so that select ones of the blades had a spiral structure as taught by Knutsen in order to have increased the stability of the tool as well as to have created channels for transmitting fluids and debris out of the wellbore (4:38-45).

Allowable Subject Matter

4. Claims 10-13, 16, and 17 are allowed.

Response to Arguments

5. Applicant's arguments with respect to claims 14 and 15 have been considered but are moot in view of the new ground(s) of rejection.

Applicant has argued that Fielder does not teach a button positioned on the laterally outermost surface of a reamer blade. The examiner disagrees. In column 5, line 62 through column 6, line 5, Fielder discloses that button **152** is located on the gauge diameter of the blade **153**. This is considered to be the laterally outermost surface of the blade as it is the portion that first engages the wellbore walls. Regarding being located on a reamer blade, the examiner notes that Figure 5 does show that the button is located on the pilot blades, however, in the description of Figure 15 in column 12, lines 48-55 Fielder teaches placing the buttons on all of the blades. This would include the reamer blades.

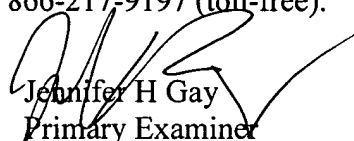
Art Unit: 3672

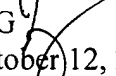
Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer H. Gay whose telephone number is (571) 272-7029. The examiner can normally be reached on Monday-Thursday, 6:30-4:00 and Friday, 6:30-1:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jennifer H Gay
Primary Examiner
Art Unit 3672

JHG 
October 12, 2005